

WHAT IS CLAIMED IS:

1. A price fluctuation predicting device for predicting always-changing price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said price fluctuation predicting device comprising:

(a) means for preparing a plurality of theoretical models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) means for sampling real trading prices in a trading market;

(c) means for generating real correlation functions based on said sampled trading prices;

(d) means for matching said correlation functions generated by said means (c) with said theoretical models in said means (a), and selecting the theoretical model which matches the best; and

(e) means for identifying the indicators of the price resilience and market instability which the theoretical model selected by said means (d) has, with that which exists in the

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real trading market.

2. A price fluctuation predicting device according to Claim 1, wherein said means (c) generates correlation functions based on a relatively small number of sets of sampling data.

3. A price fluctuation predicting device for predicting the state in a trading market with always-fluctuating prices, made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, said price fluctuation predicting device comprising:

means for obtaining price resilience indicators representing the ease of price fluctuation in the trading market;

means for obtaining market instability indicators representing the degree of effect which recent price changes have on the trading market; and

means for predicting the state of the trading market based on a combination of the price resilience indicators and market instability indicators obtained by said means.

4. A price fluctuation warning device for warning of abnormalities in price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium

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prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said price fluctuation warning device comprising:

(a) means for preparing a plurality of theoretical models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) means for sampling real trading prices in a trading market;

(c) means for generating real correlation functions based on said sampled trading prices;

(d) means for matching said correlation functions generated by said means (c) with said theoretical models in said means (a), and selecting the theoretical model which matches the best;

(e) means for identifying the indicators of the price resilience and market instability which the theoretical model selected by said means (d) has, with that which exists in the real trading market;

(f) means for judging that price fluctuations are abnormal in the event that the combination of price resilience and market instability indicators determined by said means (e) is within a predetermined range; and

(g) means for issuing a warning in response to abnormality judgements.

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5. A price fluctuation warning device according to Claim 4, wherein said means (c) generates correlation functions based on a relatively small number of sets of sampling data.

6. A price fluctuation warning device according to Claim 4, further comprising

(h) connecting means for connecting to external devices; wherein said means (g) issues warnings to external devices via said connecting means.

7. A price fluctuation warning device for predicting abnormal price fluctuations in always-fluctuating prices in a trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and issuing warnings, said price fluctuation warning device comprising:

means for obtaining price resilience indicators representing the ease of price fluctuation in the trading market;

means for obtaining market instability indicators representing the degree of effect which recent price changes have on the trading market;

means for predicting that prices will fluctuate abnormally in the event that the combination of the price resilience indicators and market instability indicators obtained by said means is within a predetermined range; and

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means for issuing warnings in response to said prediction of abnormal fluctuation.

8. A price fluctuation warning device according to Claim 7, further comprising connecting means for connecting to external devices;

wherein said means for issuing warnings issues warnings to external devices via said connecting means.

9. A price fluctuation predicting method for predicting always-changing price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said price fluctuation predicting method comprising:

(a) a step for preparing a plurality of theoretical models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) a step for sampling real trading prices in a trading market;

(c) a step for generating real correlation functions based on said sampled trading prices;

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(d) a step for matching said correlation functions generated in said step (c) with said theoretical models in said step (a), and selecting the theoretical model which matches the best; and

(e) a step for identifying the indicators of the price resilience and market instability which the theoretical model selected in said step (d) has, with that which exists in the real trading market.

10. A price fluctuation predicting method according to Claim 9, wherein said step (c) generates correlation functions based on a relatively small number of sets of sampling data.

11. A price fluctuation predicting method for predicting the state in a trading market with always-fluctuating prices, made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, said price fluctuation predicting method comprising:

a step for obtaining price resilience indicators representing the ease of price fluctuation in the trading market;

a step for obtaining market instability indicators representing the degree of effect which recent price changes have on the trading market; and

a step for predicting the state of the trading market based on a combination of the price resilience indicators and market

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instability indicators obtained in said steps.

12. A price fluctuation warning method for warning of abnormalities in price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said price fluctuation warning method comprising:

(a) a step for preparing a plurality of theoretical models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) a step for sampling real trading prices in a trading market;

(c) a step for generating real correlation functions based on said sampled trading prices;

(d) a step for matching said correlation functions generated in said step (c) with said theoretical models in said step (a), and selecting the theoretical model which matches the best;

(e) a step for identifying the indicators of the price resilience and market instability which the theoretical model selected by said step (d) has, with that which exists in the real

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trading market;

(f) a step for judging that price fluctuations are abnormal in the event that the combination of price resilience and market instability indicators determined in said step (e) is within a predetermined range; and

(g) a step for issuing a warning in response to abnormality judgements.

13. A price fluctuation warning device according to Claim 12, wherein said step (c) generates correlation functions based on a relatively small number of sets of sampling data.

14. A price fluctuation warning method according to Claim 12, wherein said price fluctuation warning method is carried out on a device having connecting means for connecting to external devices;

and wherein said step (g) issues warnings to external devices via said connecting means.

15. A price fluctuation warning method for predicting abnormal price fluctuations in always-fluctuating prices in a trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and issuing warnings, said price fluctuation warning method comprising:

a step for obtaining price resilience indicators

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representing the ease of price fluctuation in the trading market;

a step for obtaining market instability indicators representing the degree of effect which recent price changes have on the trading market;

a step for predicting that prices will fluctuate abnormally in the event that the combination of the price resilience indicators and market instability indicators obtained in said steps is within a predetermined range; and

a step for issuing warnings in response to said prediction of abnormal fluctuation.

16. A price fluctuation warning device according to Claim 15, wherein said price fluctuation warning method is carried out on a device having connecting means for connecting to external devices;

and wherein said a step for issuing warnings issues warnings to external devices via said connecting means.

17. A program providing medium for providing in a tangible and computer-readable format a computer program for executing on a computer system the processing for predicting always-changing price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium

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prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said computer program comprising:

(a) a step for preparing a plurality of theoretical models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) a step for sampling real trading prices in a trading market;

(c) a step for generating real correlation functions based on said sampled trading prices;

(d) a step for matching said correlation functions generated in said step (c) with said theoretical models in said step (a), and selecting the theoretical model which matches the best; and

(e) a step for identifying the indicators of the price resilience and market instability which the theoretical model selected in said step (d) has, with that which exists in the real trading market.

18. A program providing medium according to Claim 17, wherein said step (c) generates correlation functions based on a relatively small number of sets of sampling data.

19. A program providing medium for providing in a

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tangible and computer-readable format a computer program for executing on a computer system the processing for predicting the state in a trading market with always-fluctuating prices, made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, said computer program comprising:

a step for obtaining price resilience indicators representing the ease of price fluctuation in the trading market;

a step for obtaining market instability indicators representing the degree of effect which recent price changes have on the trading market; and

a step for predicting the state of the trading market based on a combination of the price resilience indicators and market instability indicators obtained by said steps.

20. A program providing medium for providing in a tangible and computer-readable format a computer program for executing on a computer system the processing for warning of abnormalities in price fluctuations in a type of trading market made up of multiple dealers wherein each dealer can freely set selling prices and buying prices, and wherein trading prices are predicted according to price resilience, and wherein equilibrium prices where selling prices and buying prices in the entire market reach an equilibrium according to market instabilities are predicted, said computer program comprising:

(a) a step for preparing a plurality of theoretical

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models of correlation functions of prices which are determined uniquely by indicators indicating price resilience and market instability;

(b) a step for sampling real trading prices in a trading market;

(c) a step for generating real correlation functions based on said sampled trading prices;

(d) a step for matching said correlation functions generated in said step (c) with said theoretical models in said step (a), and selecting the theoretical model which matches the best;

(e) a step for identifying the indicators of the price resilience and market instability which the theoretical model selected by said step (d) has, with that which exists in the real trading market;

(f) a step for judging that price fluctuations are abnormal in the event that the combination of price resilience and market instability indicators determined in said step (e) is within a predetermined range; and

(g) a step for issuing a warning in response to abnormality judgements.

21. A program providing medium according to Claim 20, wherein said step (c) generates correlation functions based on a relatively small number of sets of sampling data.

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and wherein said step (g) issues warnings to external devices via said connecting means.

a step for obtaining price resilience indicators
representing the ease of price fluctuation in the trading market;

a step for predicting that prices will fluctuate abnormally in the event that the combination of the price resilience indicators and market instability indicators obtained in said steps is within a predetermined range; and

a step for issuing warnings in response to said prediction of abnormal fluctuation.

24. A program providing medium according to Claim 23, wherein said computer system is carried out on a device having connecting means for connecting to external devices;

and wherein said a step for issuing warnings issues warnings to external devices connected by said connecting means.

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